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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/451,574	11/30/1999	JAMES L. APPLE	99-049-MIS	9234

7590

11/17/2001

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EXAMINER

WERNER, FRANK E

ART UNIT

PAPER NUMBER

3652

DATE MAILED: 11/17/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

091451754

Applicant(s)

James L. Apple et al

Examiner

R. E. HENNER

Group Art Unit

3652

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) filed on Sept. 17, 2001
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-7 and 22 is/are pending in the application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-7 and 22 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☒ The proposed drawing correction, filed on Sept. 17, 2001 is ☒ approved, ☐ disapproved.
- ☒ The drawing(s) filed on Aug. 20, 2001 will be forwarded to the Draftsman for approval in due course. is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
 - ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
 - ☐ received.
 - ☐ received in Application No. (Series Code/Serial Number) _____.
 - ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 243
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

Office Action Summary

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1. Applicant's election with traverse of Species G (with claims 1-7 and 22 readable thereon) in Paper No. is acknowledged. The traversal is on the ground(s) that are set forth in the noted paper. This is not found persuasive because the "Remarks" appear to be moot in view of the cancellation of claims 8-21 directed to the non-elected species. However, it should be noted that the 10 species identified by the Examiner are patentably distinct - note at least the difference in mounting of the motors relative to the columns and the different formation of the columns in at least Figs. 7 to 10, 12 etc. Accordingly, a search and consideration of each of the patentably distinct species would impose a burden on the office.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 1-7 and 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re base claims 1 and 22, no library (cell) structure (shelves, walls, etc.) has been set forth; moreover, no motive means to move the arms, hands, etc., (claim 1) or robot (claim 22) has been set forth; also re claim 22, no means has been set forth to mount the robot units and re base claims 1 and 22, it is not understood what function occurs during the manipulation of the storage units. Re claim 4, it is not understood what line 2 structurally refers to. Re claim 22, line 6, no antecedent basis exists for "the polygonal array of cells."

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-7 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheatham et al (,569-cited by Applicants) in view of Sander (,293) or Mason (,088).

Cheatham et al disclose in at least figure 1, an unnumbered center column (floor mounted) along axis 30, opposed first and second arms 28 rotatable along the column, raisable/lowerable hands 12a and 12b, etc. mounted on the arms and cellular library 44, etc., but do not disclose independently movable hands and arms which is disclosed by Sander (28, 30, etc.) ~~or~~ Mason (18, 20, 36, 101, etc.) ~~and~~ in view of the same, it would have been obvious to have substituted separate rotatable arm mountings to increase the flexibility of the apparatus as taught by either secondary reference. Re claim 2, it would have been obvious to have substituted conventional equivalent ceiling mountings of the first column, if desired, as this would have been

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known warehouse mountings of manipulators. Re claim 3, Mason (18, 19, 36, 37, etc.) teaches and renders obvious the utilization of longitudinally movable hands along the arms. Re claim 5, Sander (46, 22, etc.) teaches the obvious desirability of mounting a column within a column, if desired.

6. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over the Japanese Patent (,505).

The Japanese Patent discloses independently movable robots 31 A and 31B accessing storage units 10 in cells 2, etc. It would have been obvious to have substituted the handling of equivalent storage units, such as data storage units, if desired.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

8. Any inquiry concerning this communication should be directed to F. E. Werner at telephone number (703) 308-1140.

Werner/cw
November 7, 2001

Summary:
Claims 1-7 and 22 are rejected.
Rejection -- SSP 3 mos.

Frank E. Werner
FRANK E. WERNER
PRIMARY EXAMINER "101
GROUP ~~3100~~ 3652